

Amendments to the Specification

Please replace the paragraph beginning at page 1, line 6, with the following rewritten paragraph:

A high Tc superconducting wire/tape is usually a composite consisting of a superconducting core and a metallic sheath. Many properties of the wire/tape depend on the metallic sheath materials. Additional layers over the metallic sheath can, however, modify the properties of the wire/tape, as described below in several examples. ~~For instance~~

Please replace the paragraph beginning at page 1, line 10, with the following rewritten paragraph:

(1) ~~requires a~~ A superconducting device such as a motor, a transformer cable or a magnet requires additional insulating materials between the wires or between the adjacent turns of the winding in order to prevent short circuiting. According to EP 0 786 783 insulating layers have been applied between the superconducting layers formed by bare Bi-2223 tapes. High Tc wires having insulating surface layers could simplify the process of making superconducting devices and the volume of the devices could be reduced.

Please replace the paragraph beginning at page 1, line 17, with the following rewritten paragraph:

(2) ~~the~~ The mechanical strength of a high Tc superconducting wire/tape depends on the sheath material. An Ag alloy sheathed tape is for instance much stronger than a tape sheathed with

pure Ag. However, it is difficult to distinguish the Ag alloy from the pure Ag just by looking. The additional surface layer can be coloured or marked which enable to distinguish between different kinds of wire/tapes. It is common that a tape is annealed in a pan-cake or solenoid form. Asymmetry pre-stress could be built up during the annealing and therefore two sides of a high T_c tape could have different mechanical properties. It is therefore very important to be able to distinguish between the two different sides during a winding process, for instance by using different colours to distinguish between the two sides of the tape, one colour for the tensile stressed side and another colour for the compressed stressed side. As a result a degrading of the wire/tape could be omitted.

Please replace the paragraph beginning at page 2, line 6, with the following rewritten paragraph:

(3) ~~the~~ The Ag or Ag alloy sheath is not ~~complete~~ completely gas tight or liquid tight. Long time exposure in air or long time in contact with ~~with~~ liquid nitrogen could cause a degrading of the high T_c wire/tape. An additional layer could protect the tape from moisture, water, liquid nitrogen or other chemicals which could degrade the superconducting tape.

Please replace the paragraph beginning at page 2, line 11, with the following rewritten paragraph:

(4) ~~the~~ The additional layer could change the surface friction of the wire/tape. A low friction is for instance needed for winding a superconducting cable.

Please replace the paragraph beginning at page 3, lines 13 and 14 (of amended sheet), with the following rewritten paragraph:

According to the invention the coating is performed after the final heat treatment and the coating materials are typically polymers and may be selected from a group consisting of polyurethane, polyesterimide, epoxy, ~~tetrafluoroethylene~~ polytetrafluoroethylene or Teflon®, or another insulating material. In addition, the surface layers may contain any of a group consisting of ceramic powder, graphite, carbon fiber, or metallic polymeric or elastomeric particles or fibers.

Please replace the paragraph beginning at page 4, line 8, with the following rewritten paragraph:

In fig. 1, an insulating layer (3) (3a) of a thickness of ~~0,015~~ 0.015 mm is applied to a high T_c Bi-2212 wire having a ceramic Bi-2212 core (1) (1a) and a metallic sheath (2) (2a). The material of the insulating surface layer is PVB and is applied to the wire by a standard dip-coating method at a speed of 5 meters/min using alcohol as a solvent for PVB (5 weight% of PVB). Thereafter, the solvent is evaporated and the PVB is cured at a temperature of 250° C

in one minute. The surface layer is electrical insulating and can also protect the wire from water and liquid nitrogen.

Please replace the paragraph beginning at page 4, line 16, with the following rewritten paragraph:

In Fig. 2, a surface layer of a multilayer structure is applied to a multifilamentary Bi-2223 tape. This tape contains a number of Bi-2223 filaments (1) (1b) in a metallic matrix (2) (2b). The surface layer contains an insulating layer (3) (3b) and an outer low friction layer (4) (4b). The insulating layer (3) (3b) is applied by using a multifunctional acrylic resin which is cured by means of UV light of 2J/cm² by using, e.g., a standard Nextrom OFC coating line. A suitable material for the low friction is ~~tetrafluoroethylene~~ polytetrafluoroethylene or Teflon® which is applied by a standard dry-powder-coating technique using, e.g., a Haugaard powder coating gun. The multilayer surface is insulating and has a low surface friction. A low surface friction can reduce stress in the tape during the winding as well as during the operation of a superconducting apparatus.

Please replace the paragraph beginning at page 5, line 3, with the following rewritten paragraph:

In Fig. 3, the surface layer is applied to a bunch of multifilamentary Bi-2223 tapes. Each of the Bi-2223 tapes is coated with an insulating layer (3) (3c) using the method according to

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example 2. The bunch of the tapes is therefore coated with a low friction ~~(4)~~ (4c) layer as described in example 2.